Making Inferences and Drawing Conclusions Guidebook

Inference is a complex skill and is connected to many other reading strategies. It is important to be able to infer from a text in order to identify evidence and draw conclusions.

CCRS Anchor #1 requires that students read closely to determine what the text says explicitly and to **make logical inferences from it**; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

Many texts on the GED®, higher education, and in the workplace, require inference. It is skill that is interwoven into most other reading skills.

Considerations for Inferential Comprehension

Inferential comprehension is often described simply as the ability to *read between the lines*. It requires a reader to blend the literal content of a selection with prior knowledge, intuition, and imagination for conjecture or to make hypotheses. Barrett's Taxonomy of Reading Comprehension (1974) identifies the following eight subtasks that enable students to make inferences with facility.

- Inferring supporting details guessing about additional facts the author could have included in the selection that would have made it more informative, interesting, or appealing
- Inferring the main idea providing the main idea, general significance, theme, or moral that is not explicitly stated in the selection
- Inferring sequence guessing what action or incident might have taken place between two explicitly stated actions or incidents or making hypotheses about what could happen next
- Inferring comparisons inferring likenesses and differences in characters, times, or places
- Inferring cause-and-effect relationships hypothesizing about the motives of characters and their interactions with others and with time and place
- Inferring character traits hypothesizing about the nature of characters on the basis of explicit clues presented in the selection
- Predicting outcomes guessing the outcome of a selection after reading an initial portion of it
- Inferring about figurative language inferring literal meanings from the author's figurative use of language.

Stated differently, Keene and Zimmerman (1997) observed that when proficient readers infer, they:

- · Draw conclusions from text
- Make reasonable predictions as they read, test and revise those predictions as they read further
- · Create dynamic interpretations of text that are adapted as they continue to read
- Use the combination of background knowledge and explicitly stated information from the text to answer
 questions they have as they read
- Make connections between conclusions they draw and other beliefs or knowledge
- Make critical or analytical judgments about what they read

Proficient readers are better able to remember and apply what they have read, create new background knowledge for themselves, discriminate and critically analyze text and authors, and engage in conversation and/or other analytical responses to what they read.

Conversely, struggling readers have difficulty with some or all of these comprehension skills. Fortunately, the results of many studies associated with comprehension strategies (e.g., Lenz & Hughes, 1990; Scanlon, Deshler, & Shumaker, 1996; Shumaker, Deshler, Alley, Warner, & Denton, 1982) indicate that students with high-incidence disabilities can learn to mediate their comprehension of reading material through intensive, systematic, and explicit instruction in learning strategies.

Research conducted in the 1970s concluded that classroom teachers were spending very little time on the actual process of teaching reading comprehension. For example, Durkin (1978-1979) found that although teachers gave many workbook assignments and asked many questions about what students had read, these exercises usually assessed students' understanding rather than teaching them how to comprehend. In response to Durkin's findings, much subsequent research during the 1980s was devoted to discovering how to teach comprehension strategies directly. One widely researched model, *explicit instruction*, involves four phases:

- · Teacher explanation and modeling of a strategy
- Guided practice during which teachers gradually give students more responsibility for task completion
- Independent practice accompanied by feedback
- Application of the strategy in real reading situations (Fielding & Pearson, 1994).

Indeed, as Pearson and Duke (2002) point out, "Comprehension improves when teachers provide explicit instruction in the use of comprehension strategies. Comprehension improves when teachers implement activities that support the understanding of the text that students will read in their classes"

(p. 247). The material that follows provides suggestions for introducing to students the concept of making inferences and showcases strategies for explicit instruction of inferential comprehension skills.

Taken from "The Inferential Reading Comprehension Considerations Packet" developed by College of William and Mary Training and Technical Assistance Center http://education.wm.edu/centers/ttac/documents/packets/inferential.pdf

In addition to those listed above, close readers will need to use inference to draw conclusions in complex informational texts in higher education and the workplace. Sometimes the documents require you to be able to infer:

- 1) The author's purpose
- 2) The author's claim and viewpoint
- 3) The author's use of language to support a claim
- 4) How the author has integrated ideas to support a claim

Introducing Inference

One of the best ways to introduce students to inference is by showing them a picture and asking them to answer text-based questions about the picture.

- See (Insert Responding to Visual Text PPT)
- Using selection guidelines, ask students to identify their own visual literacy graphics online.

Trash Bag Game

Another way to introduce inference is the <u>Trash Bag Game</u>.

- Put items in a bag and tell students you found it on your way to work.
- Take the articles out one by one and make a list of them on the board or on chart paper.
- Ask the students to make a case about the owner of the items in the bag. Ask them to cite evidence of their inferences.

A variation on the trash bag game is to "Be a Historian."

- It is the same process as trash bags, but the items could be put in a purse or suitcase.
- Ask students to act like historians and, using the historical method, describe the owner
 of the items and cite evidence for each inference.

Aesop's Fables http://aesopfables.com/

- Ask students to read a short fable, identify the theme, and determine a moral or lesson.
- Ask them to underline phrases in the fable that they used determine the moral or lesson they chose.

Minute Mysteries

• Ask students to read a short mystery and solve it by identifying clues in the text. You can add text-based questions to guide them along.

Examples of Minute Mysteries:

- Two children born in the same hospital, in the same hour, day, and year, have the same mother and father, but are not twins.
- A couple will build a square house. In each wall they'll have a window, and each window will face north.
- There are a pipe, a carrot, and a pile of pebbles together in the middle of a field.
- An ordinary American citizen, with a clean police record but no passport, managed to visit over thirty foreign countries. He was welcomed in each country, and left each one of his own accord. He did this in one day.
- You have a box, it's heavy. As you hold it gets lighter. How is this possible?
- A cowboy rode out on Friday, was gone for two days and came back on Saturday. How is this possible.

KIS Strategy (Key Words, Infer, Support)

This mnemonic strategy helps students remember the three steps in making and supporting inferences.

- Students need to underline key words and facts from the text.
- Next students make inferences using the key words or facts to answer the question.
- Lastly, the students list background knowledge used to support their answers.

It is recommended to use a graphic organizer when teaching this strategy. See: KIS Strategy for Inference.doc

Inferencing Strategies/Tools

QAR

One key inference strategy is the QAR. It is a simple, easy to apply strategy that scaffolds a reader from literal to inferential questions. http://www.adlit.org/strategies/19802/

The Q uestion- A nswer R elationships			
In the Text		In My Head	
Right There	Search and Locate	Author and Me	On My Own
The answer is usually located in one sentence and is EASY TO FIND. The reader will find some of the same words in the answer that are in the question.	The answer is located in more than one sentence or paragraph. The reader must PUT different parts of the text TOGETHER to find the answer. The information is stated in the text and the reader answers the question by PUTTING it TOGETHER.	The answer is IMPLIED and is not stated in the text. The reader must access PRIOR KNOWLEDGE OF INFORMATION provided by the author and make an inference.	The answer is not located in the text. The reader can even answer the question WITHOUT reading the text. You need to use your OWN EXPERIENCES to answer the questions.
On the Line	On Several Lines	Between the Lines	Beyond the Lines

QAR Question Stems

In the Book		
Right There	Think & Search	
What did	How do you	
Who did	What happened to	
How many	How long did	
What was	What time did	
Who are	What happened before	
When did	What happened after	
What does	How would you describe	
What kind	What examples	
Who is	Where did	
What is	How do you make	
Where is	Why does	
Name	Explain	
List	Compare	

In My Head		
Author & Me	On My Own	
Do you agree with Why did the main character What did they mean by How did she/he feel when Give the reasons why What do you think What if What do you think will happen What did the author mean by What did the character learn about	Have you ever What are the reasons that If you could If you were going to What are the pros & cons of Do you know anyone who How do you feel about What is your favoritewhy What do you do when What can be exciting about What do you already know about What would you do if	

(Insert QAR Census Bureau Example)

Teaching Inference Using Graphic Organizers

Check out these two short videos on how to teach inference using graphic organizers. The second video is 10 minutes long (optional) and more geared to younger students, however, provides great ideas on how to present and guide students to develop inferencing skills. http://ammadson2.weebly.com/inference-graphic-organizer.html

Bonus OPTIONAL Resources for Review:

The College of William and Mary's Training and Technical Assistance Center has put together an inferential comprehension considerations packet that you can use with any number of adult literacy complex text found on the GED and the workplace. http://education.wm.edu/centers/ttac/documents/packets/inferential.pdf

Although written for 5th graders, this resource provides some great strategies to introduce students to inference of narrative texts. I would recommend replacing the text in this resource with texts from the GED® Test item sampler. http://www.risd.k12.nm.us/assessment_evaluation/ImprovSBAscores/SBA%20Reading/5th%20Grade/Inference.pdf

Three short videos of a teacher modeling how to infer key ideas and details. http://www.adlit.org/articles/watch_and_learn/55494/